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EXAMINER
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AREVALO, JOSEPH

ART UNIT	PAPER NUMBER
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2617

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,131	<b>Applicant(s)</b> VERMA ET AL.	
	<b>Examiner</b> JOSEPH AREVALO	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/20/2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-15, 17-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-15, 17-22 and 25 is/are rejected.
- 7) ☒ Claim(s) 11 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/20/2010 has been entered.

### Response to Arguments

2. Applicant's arguments, filed on **12/20/2010** with respect to claims **1-11, 13-15, 17-23 and 25** in the remarks, have been considered but are moot in view of the new ground(s) of rejection necessitated by the new limitations added to claims 1 and 14.

### Claim Objections

3. Claim 22 is objected to because of the following informalities: Applicant uses claim 22 depending on a claim that was cancelled “22. *(previously submitted) The apparatus of the claim 16, further....*” on claim 22, line 1. Appropriate correction is required.

### Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a)

7. Claims **1-10, 13-15, 17-22 and 25** are rejected under 35 U.S.C. 103 (a) as being anticipated by **Longoni Patent Application No. :( US 2004/0082366 A1)** in view of **Chow Patent No. :( US 6,975,634 B1)**

For claim 1, Longoni discloses the method, for supporting an interworking between a wireless local area network (**Longoni shows and discloses in figures 4 Paragraph [0039] the UTRAN short for UMTS Terrestrial Radio Access Network. It has a RCN interworking with core network and BSC. This communications network, commonly referred to as 3G (for 3rd Generation Wireless Mobile Communication Technology), and a mobile communications network (Longoni shows the GSM which is considered as mobile communication network), the mobile communications network including a radio access network comprising a transceiver coupled to a radio network controller, the radio network controller being coupled to a core network (figure 4), the method comprising the steps of:**

providing an interworking function (**IWU figure 4**) disposed on the wireless local area network **side** of the mobile communications network (**figure 4**) (**paragraphs [0008] discloses that each RAN enables services such as GSM, Bluetooth IEEE 802.11 HL2 and WCDMA) and (paragraph [0040] lines 8-15);**

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connecting the wireless local area network to the mobile communications network by employing the interworking function (**figure 7 discloses the RNAS can interwork with different protocols wirelessly admitting the BSC and the RNC**) (Paragraph [0039] and [0041]) as an auxiliary radio network controller associated with the mobile communications network (Paragraph [0043] and [0044]) (the IWF works as an auxiliary radio network controller because the Radio Network Controller (or RNC) is a governing element in the UMTS radio access network (UTRAN) and is responsible for controlling the Node Bs that are connected to it. The RNC carries out radio resource management, some of the mobility management functions. The RNC connects to the Circuit Switched Core Network through Media Gateway (MGW) and to the SGSN (Serving GPRS Support Node) in the Packet Switched Core Network). However, **Longoni** discloses all the subject matter of the claim invention including the two networks, the UMTS and the WLAN including the devices that those two network protocols can support, but **Longoni** does not specifically disclose the mobile communications network further includes a serving general packet radio service support node(SGSN), a gateway general packet radio service support node(GGSN), and a node B, and said method further comprises the steps of: forming a data path from a user equipment to the interworking function to the serving radio network controller to the serving general packet radio service support node to the gateway general packet radio service support node; and forming a control path from the user equipment to the node B to the serving radio network controller to the serving general packet radio service support node to the gateway general packet radio service support node as recited in claim 1

**Chow** from the same or similar fields of the endeavor teaches mobile communications network further includes a serving general packet radio service support node (SGSN), a gateway general packet radio service support node (GGSN), and a node B, and said method further comprises the steps of:

forming a data path from a user equipment(129 figure 1) to the interworking function (115 figure 1) to the serving radio network controller(119 figure1) to the serving general packet radio service support node (137 figure 1) to the gateway general packet radio service support

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node(133 figure 1) ( the path is created when the subscriber terminal 129 communicates over the base station 121, communicating with 115 interworking function that connects to switching routing node 103 that communicates with the 119 MSC that controls the mobile communication and transmission communicating with the SGSN 137 finishing the data path at GGSN 133)(column 4 lines 9-41); and

forming a control path from the user equipment (129 figure 1) to the node B ((121 figure 1) to the serving radio network controller (119 figure 1) to the serving general packet radio service support node (137 figure 1) to the gateway general packet radio service support node(133 figure 1) ( the path is created when the subscriber terminal 129 communicates over the base station 121 and communicates with the 119 MSC that controls the mobile communication and transmission communicating with the SGSN 137 finishing the data path at GGSN 133)(column 3 lines 24-42). It would have been obvious for the person of ordinary skill in the art at the time of the invention to use the mobile communications network further includes a serving general packet radio service support node(SGSN), a gateway general packet radio service support node(GGSN), and a node B, and said method further comprises the steps of:

forming a data path from a user equipment to the interworking function to the serving radio network controller to the serving general packet radio service support node to the gateway general packet radio service support node; and

forming a control path from the user equipment to the node B to the serving radio network controller to the serving general packet radio service support node to the gateway general packet radio service support node as taught by **Chow** into the method and system for seamless roaming between wireless communication networks with a mobile terminal of **Longoni**.

The mobile communications network further includes a serving general packet radio service support node (SGSN), a gateway general packet radio service support node (GGSN), and a node B, and said method further comprises the steps of:

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forming a data path from a user equipment to the interworking function to the serving radio network controller to the serving general packet radio service support node to the gateway general packet radio service support node; and

forming a control path from the user equipment to the node B to the serving radio network controller to the serving general packet radio service support node to the gateway general packet radio service support node can be modify/implemented by combining the mobile communications network further includes a serving general packet radio service support node (SGSN), a gateway general packet radio service support node (GGSN), and a node B, and said method further comprises the steps of:

forming a data path from a user equipment to the interworking function to the serving radio network controller to the serving general packet radio service support node to the gateway general packet radio service support node; and

forming a control path from the user equipment to the node B to the serving radio network controller to the serving general packet radio service support node to the gateway general packet radio service support node with the WLAN protocol and the GSN described above by Longini. This process is implemented as a hardware solution or as firmware solutions of **Chow** into the method and system for seamless roaming between wireless communication networks with a mobile terminal of **Longoni**. As disclosed in **Chow**, the motivation for the combination would be to create into the two different protocol networks two paths that the user can communicates in different way making the communication much faster and reliable. That could be produced by the user's decision to handover one of the protocols or can be automatically according to the signal strength.

For claim 2, **Longoni** discloses the method, wherein the mobile communications network comprises a universal mobile telecommunications system and the interworking function is employed as a drift radio network controller (**Longoni shows and discloses in figures 4 and 7 and Paragraph [0039]** the UTRAN short for UMTS Terrestrial Radio Access Network. It has a RCN interworking with core network and BSC. This communications network, commonly referred to as 3G (for 3rd Generation Wireless Mobile Communication

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**Technology), can carry many traffic types from real-time Circuit Switched to IP based Packet Switched. The UTRAN allows connectivity between the UE (user equipment) and the core network).**

For claim 3, **Longoni** discloses the method, wherein said connecting step connects the wireless local area network to the mobile communications network through a user plane interface(**figures 4, 7**)(**Paragraph [0040]** ).

For claim 4, **Longoni** discloses the method, wherein the mobile communications network has a serving radio network controller, and the user plane interface is disposed between the interworking function and the serving radio network controller (**figure 7**) (**Paragraph [0043]**).

For claim 5, **Longoni** discloses the method, wherein said connecting step comprises the step of establishing an Iur interface between the interworking function and the serving radio network controller (**Longoni shows and discloses in figure 4 and Paragraph [0041] lines 5-10 the Iur Interface connected between the interworking function and the radio network controller**).

For claim 6, **Longoni** discloses the method, further comprising the step of diverting data from the serving radio network controller to the wireless local area network through the Iur interface (**Longoni shows and discloses in figure 7 and Paragraph [0043] the Iur Interface connected between the radio network controller to the logical radio network controller which is in the interworking unit that communicates with the IP BTS** ).

For claim 7, **Longoni** discloses the method, wherein said connecting step splits a control plane between the mobile communications network and the wireless local area network and also splits a user plane between the mobile communications network and the wireless local area network (**Longoni shows in figure 7 how is splitting the communications according where the communication come from. As example Longoni shows that a communication with the**



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**radio network controller with the logical network or the interworking function identified as Iur and Iur').**

For claim 8, **Longoni** discloses the method, wherein said connecting step comprises the step of transmitting a radio link setup request from the serving radio network controller to the interworking function (**paragraph [0040]**).

For claims **9-10**, **Longoni** discloses the method in paragraph 7 of this office action as set forth in claims 4, and 8. However, **Longoni** does not specifically disclose the RNC includes at least one of quality of service (QoS) parameters and a type of dedicated/common transport channel **as recited in claim 9**; the call admission control (CAC) by the IWF **as recited in claim 10**.

**Chow** from the same or similar fields of the endeavor teaches the RNC includes at least one of quality of service (QoS) parameters and a type of dedicated/common transport channel (**column 3 lines 1-12 as recited in claim 9**); the call admission control (CAC) by the IWF(**column 4 lines 16-20 as recited in claim 10**). Thus, it would have been obvious for the person of ordinary skill in the art at the time of the invention to use the RNC includes at least one of quality of service (QoS) parameters and a type of dedicated/common transport channel; the call admission control (CAC) by the IWF as taught by **Chow** into the method and system for seamless roaming between wireless communication networks with a mobile terminal of **Longoni**.

The RNC includes at least one of quality of service (QoS) parameters and a type of dedicated/common transport channel; the call admission control (CAC) by the IWF can be modify/implemented by combining the RNC includes at least one of quality of service (QoS) parameters and a type of dedicated/common transport channel; the call admission control (CAC) by the IWF with the device. This process is implemented as a hardware solution or as firmware solutions of **Chow** into the method and system for seamless roaming between wireless communication networks with a mobile terminal of **Longoni**. As disclosed in **Chow**, the motivation for the combination would be to use the RCN that could include quality of service to the transmission in a dedicating channel making the connection faster and more reliable.

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For claim 13, **Longoni** teaches the method, further comprising the step of releasing data bearers of the mobile communications network when activity has ceased on data channels of the mobile communications network (**paragraph [0034]**)

Claim 14 is an apparatus claim corresponding to method claim 1. Hence, the steps performed in method claim 1 would have necessitated the elements in apparatus claim 14. Therefore, claim 14 has been analyzed and rejected w/r to claim 1, see rationale as applied above.

Claim 15, 17-22 and 25 are apparatus claims corresponding to method claims 3, 5-10 and 13. Hence, the steps performed in method claims 3, 5-10 and 13 would have necessitated the elements in apparatus claims 15, 17-22 and 25. Therefore, claims 15, 17-22 and 25 have been analyzed and rejected w/r to claims 3, 5-10 and 13, see rationale as applied above.

### **Claim Objections**

8. Claims 11 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH AREVALO whose telephone number is **(571)-270-3121**. The examiner can normally be reached on Monday through Friday 8:00AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on **(571)-272-7915**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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/JOSEPH AREVALO/

Examiner, Art Unit 2617

/MARIVELISSE SANTIAGO-CORDERO/

Primary Examiner, Art Unit 2617